

A. Examine window of typed SNPs

Reference haplotypes aligned with genotypes at the typed SNPs (untyped SNPs not needed)



One sample's unphased genotypes. One marker is missing due to genotyping error

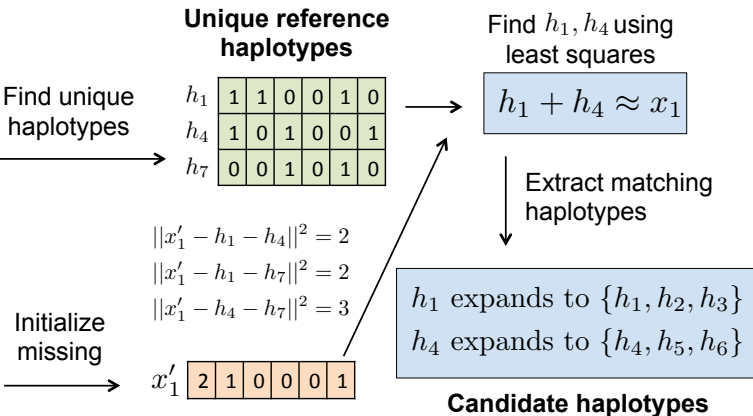
Reference haplotypes

h_1	1	1	0	0	1	0
h_2	1	1	0	0	1	0
h_3	1	1	0	0	1	0
h_4	1	0	1	0	0	1
h_5	1	0	1	0	0	1
h_6	1	0	1	0	0	1
h_7	0	0	1	0	1	0
h_8	0	0	1	0	1	0

Target genotype

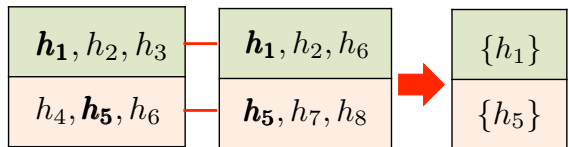
x_1	2	1	0	0	?	1
-------	---	---	---	---	---	---

B. Find optimal haplotype pairs in each window

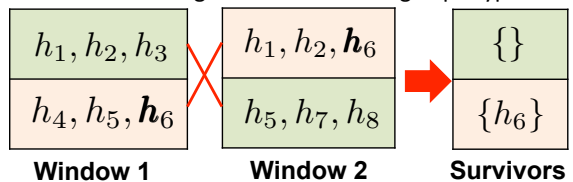


C. Connect neighbors in 1 of 2 ways

Parallel connection generates 2 surviving haplotypes:



A switch at window 2 generates 1 surviving haplotype:



D. Stitch window-by-window from left to right

